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Governor

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NEW MEXICO ENVIRONMENT DEPARTMENT

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BUTCH TONGATE
Cabinet Secretary

J. C. BORREGO
Deputy Secretary

Certified Mail – Return Receipt Requested

May 4, 2018

Mr. Cass Thompson, Vice-President
Ranchland Utility Company
Post Office Box 28039
Santa Fe, NM 87502

Re: Ranchland Utilities WWTP, Minor, Individual Permit; SIC 4952; NPDES Compliance Evaluation Inspection; NPDES Permit No. NM0030368; Inspection Date: April 11, 2018

Dear Mr. Thompson:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Further explanations and problems noted during this inspection are discussed on the completed form and checklist of this inspection report. Introduction, treatment scheme, and problems noted during this inspection are discussed in the "Further Explanations" section of the inspection report.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

David Long, Enforcement Coordinator
Environmental Protection Agency, Region 6
NPDES Enforcement Branch (6EN-WM)
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Sarah Holcomb, Program Manager
New Mexico Environment Department
Surface Water Quality Bureau (N2050)
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

Ranchland Utilities

May 4, 2018

Page 2 of 2

David Long (Long.David@epa.gov) is USEPA Region 6's Acting NPDES Enforcement Coordinator at the above address. If you have any questions about this inspection report, please contact Sandra Gabaldón at 505-827-1041 or at Sandra.gabaldon@state.nm.us.

Sincerely,

/s/ Sarah Holcomb

Sarah Holcomb
Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
David Long, USEPA (6EN-WM) by e-mail
Amy Andrews, USEPA (6EN-WM) by e-mail
David Esparza, USEPA (6EN-WM) by e-mail
Brent Larsen and Tung Nguyen, USEPA (6WQ-PP) by e-mail
Gladys Gooden-Jackson, USEPA (6EN-WC) by e-mail
John Rhoderick, NMED District I by e-mail

Leonard Quintana by e-mail

SH/sg



Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 <input type="text" value="N"/> 2 <input type="text" value="5"/> 3 <input type="text" value="N"/> <input type="text" value="M"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="3"/> <input type="text" value="0"/> <input type="text" value="3"/> <input type="text" value="6"/> <input type="text" value="8"/>	<input type="text" value="1"/> <input type="text" value="8"/> <input type="text" value="0"/> <input type="text" value="4"/> <input type="text" value="1"/> <input type="text" value="1"/>	18 <input type="text" value="C"/>	19 <input type="text" value="S"/>	20 <input type="text" value="1"/>	
<input type="text" value="M"/> <input type="text" value="I"/> <input type="text" value="N"/> <input type="text" value="O"/> <input type="text" value="R"/> <input type="text" value="D"/> <input type="text" value="O"/> <input type="text" value="M"/> <input type="text" value="E"/> <input type="text" value="S"/> <input type="text" value="T"/> <input type="text" value="I"/> <input type="text" value="C"/>					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 <input type="text" value="1"/> 69	70 <input type="text" value="2"/>	71 <input type="text" value="N"/>	72 <input type="text" value="N"/>	73 <input type="text" value="M"/> <input type="text" value="I"/> <input type="text" value="N"/> <input type="text" value="O"/> <input type="text" value="R"/>	80

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) Take 1-25 South; Exit 276; Turn Left on Rancho Viejo Blvd; Turn Right on Avenida del Sur and go to Avenida Nu Po. Turn right and proceed to WWTP. SANTA FE COUNTY	Entry Time /Date 0915 Hours / April 11, 2018	Permit Effective Date August 1, 2013
	Exit Time/Date 1100 Hours / April 11, 2018	Permit Expiration Date July 31, 2018
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Leonard Quintana, Certified Operator, Level IV / 470-3697 Robert Gutierrez, Certified Operator, Level III	Other Facility Data SIC 4952	
Name, Address of Responsible Official/Title/Phone and Fax Number Cass Thompson, cass@ranchoviejo.com Ranchland Utility Company Post Office Box 28039 Santa Fe, NM 87502	35°35'22.56" N -106°01'28.65" W Contacted Yes <input type="checkbox"/> No <input type="checkbox"/>	

Section C: Areas Evaluated During Inspection (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

<input type="text" value="U"/> Permit	<input type="text" value="U"/> Flow Measurement	<input type="text" value="U"/> Operations & Maintenance	<input type="text" value="N"/> CSO/SSO
<input type="text" value="S"/> Records/Reports	<input type="text" value="M"/> Self-Monitoring Program	<input type="text" value="S"/> Sludge Handling/Disposal	<input type="text" value="N"/> Pollution Prevention
<input type="text" value="S"/> Facility Site Review	<input type="text" value="N"/> Compliance Schedules	<input type="text" value="N"/> Pretreatment	<input type="text" value="N"/> Multimedia
<input type="text" value="S"/> Effluent/Receiving Waters	<input type="text" value="M"/> Laboratory	<input type="text" value="N"/> Storm Water	<input type="text" value=""/> Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

Please see checklist and further explanations for details of findings

Name(s) and Signature(s) of Inspector(s) Sandra Gabaldon /s/ Sandra Gabaldon	Agency/Office/Telephone/Fax NMED/SWQB/(505) 827-1041/(505) 827-0160	Date 05-04-2018
Signature of Management QA Reviewer /s/ Sarah Holcomb Sarah Holcomb, Program Manager	Agency/Office/Phone and Fax Numbers NMED/SWQB/(505) 827-2798/(505) 827-0160	Date 05-04-2018

SECTION A – PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS

☐ S ☐ M ☒ U ☐ NA (FURTHER EXPLANATION ATTACHED YES)

DETAILS: Permit Application received after the 180 day requirement.

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE

☒ Y ☐ N ☐ NA

2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES

☐ Y ☐ N ☒ NA

3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT

☒ Y ☐ N ☐ NA

4. ALL DISCHARGES ARE PERMITTED

☒ Y ☐ N ☐ NA

SECTION B – RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.

☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED NO)

DETAILS:

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.

☐ Y ☒ N ☐ NA

2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.

☒ S ☐ M ☐ U ☐ NA

a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING

☒ Y ☐ N ☐ NA

b) NAME OF INDIVIDUAL PERFORMING SAMPLING

☒ Y ☐ N ☐ NA

c) ANALYTICAL METHODS AND TECHNIQUES.

☒ Y ☐ N ☐ NA

d) RESULTS OF ANALYSES AND CALIBRATIONS.

☒ Y ☐ N ☐ NA

e) DATES AND TIMES OF ANALYSES.

☒ Y ☐ N ☐ NA

f) NAME OF PERSON(S) PERFORMING ANALYSES.

☒ Y ☐ N ☐ NA

3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.

☒ S ☐ M ☐ U ☐ NA

4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.

☒ S ☐ M ☐ U ☐ NA

5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.

☒ Y ☐ N ☐ NA

SECTION C – OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.

☐ S ☐ M ☒ U ☐ NA (FURTHER EXPLANATION ATTACHED YES)

DETAILS:

1. TREATMENT UNITS PROPERLY OPERATED.

☐ S ☒ M ☐ U ☐ NA

2. TREATMENT UNITS PROPERLY MAINTAINED.

☐ S ☒ M ☐ U ☐ NA

3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED .

☒ S ☐ M ☐ U ☐ NA

4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.

☐ S ☒ M ☐ U ☐ NA

5. ALL NEEDED TREATMENT UNITS IN SERVICE

☒ S ☐ M ☐ U ☐ NA

6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.

☒ S ☐ M ☐ U ☐ NA

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.

☒ S ☐ M ☐ U ☐ NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.

☒ Y ☐ N ☐ NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.

☒ Y ☐ N ☐ NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.

☒ Y ☐ N ☐ NA

SECTION C – OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR?

☐ Y ☒ N ☐ NA

IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?

☐ Y ☐ N ☒ NA

HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?

☐ Y ☐ N ☒ NA

10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?

☐ Y ☐ N ☐ NA

IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?

☐ Y ☐ N ☐ NA

SECTION D – SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS.
DETAILS:☐ S ☒ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED (YES).)

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.

☒ Y ☐ N ☐ NA

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.

☒ Y ☐ N ☐ NA

3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.

☒ Y ☐ N ☐ NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.

☒ Y ☐ N ☐ NA

5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.

☐ Y ☒ N ☐ NA

6. SAMPLE COLLECTION PROCEDURES ADEQUATE

☒ Y ☐ N ☐ NA

a) SAMPLES REFRIGERATED DURING COMPOSITING.

☒ Y ☐ N ☐ NA

b) PROPER PRESERVATION TECHNIQUES USED.

☒ Y ☐ N ☐ NA

c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.

☒ Y ☐ N ☐ NA7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE
THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT?☐ Y ☐ N ☒ NA

SECTION E – FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS.
DETAILS:☐ S ☐ M ☒ U ☐ NA (FURTHER EXPLANATION ATTACHED (YES).)

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.

☐ Y ☒ N ☐ NA

TYPE OF DEVICE: 6" Parshall Flume

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.

☒ Y ☐ N ☐ NA

3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.

☒ Y ☐ N ☐ NA

4. CALIBRATION FREQUENCY ADEQUATE.

☐ Y ☒ N ☐ NA

RECORDS MAINTAINED OF CALIBRATION PROCEDURES.

☐ Y ☒ N ☐ NA

CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.

☐ Y ☒ N ☐ NA

5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE.

☐ Y ☒ N ☐ NA

6. HEAD MEASURED AT PROPER LOCATION.

☐ Y ☒ N ☐ NA

7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.

☒ Y ☐ N ☐ NA

SECTION F – LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS.
DETAILS:☐ S ☒ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED ↓)

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)

☒ Y ☐ N ☐ NA

Ranchland Utilities						PERMIT NO. NM0030368	
SECTION F - LABORATORY (CONT'D)							
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA	
4. QUALITY CONTROL PROCEDURES ADEQUATE.						<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA	
5. DUPLICATE SAMPLES ARE ANALYZED. <u>0</u> % OF THE TIME.						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	
6. SPIKED SAMPLES ARE ANALYZED. <u> </u> % OF THE TIME.						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
7. COMMERCIAL LABORATORY USED.						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
LAB NAME:		Hall Environmental Analysis Laboratory Inc.			<u>BioAquatics</u>		
LAB ADDRESS		4901 Hawkins St NE, Albuquerque, NM 87109			2501 Mayes Rd # 100, Carrollton, TX 75006		
PARAMETERS PERFORMED		BOD, TSS, E. coli			Biomonitoring		
SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>No.</u>).							
OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001							
RECEIVING WATER OBSERVATIONS <u> </u> The effluent is currently being diverted to irrigation.							
SECTION H - SLUDGE DISPOSAL							
SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. DETAILS:				<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA (FURTHER EXPLANATION ATTACHED <u>NO.</u>).			
1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY.				<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA			
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503.				<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA			
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO <u>N/A</u> (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)							
SECTION I - SAMPLING INSPECTION PROCEDURES (FURTHER EXPLANATION ATTACHED <u> </u>).							
1. SAMPLES OBTAINED THIS INSPECTION.				<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA			
2. TYPE OF SAMPLE OBTAINED							
GRAB <u> </u>		COMPOSITE SAMPLE <u> </u>		METHOD <u> </u>		FREQUENCY <u> </u>	
3. SAMPLES PRESERVED.				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA			
4. FLOW PROPORTIONED SAMPLES OBTAINED.				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA			
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE.				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA			
6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE.				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA			
7. SAMPLE SPLIT WITH PERMITTEE.				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA			
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA			
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.				<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA			

**Compliance Evaluation Inspection
Ranchland Utilities Water Reclamation Facility
NPDES Permit No. NM0030368
April 11, 2018**

Introduction

A Compliance Evaluation Inspection (CEI) was conducted at the Ranchland Utilities Water Reclamation Facility, located in Santa Fe, New Mexico on April 11, 2018 by Ms. Sandra Gabaldón, accompanied by Mr. Daniel Valenta, of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB). This facility is classified as a minor private domestic discharger under the federal Clean Water Act (CWA), Section 402. This facility is regulated under the National Pollutant Discharge Elimination System (NPDES) permit program, and is assigned NPDES permit number NM0030368. The facility design flow is 0.375 million gallons per day (MGD).

The Ranchland Utilities Water Reclamation facility discharges into the Canada del Rancho, in segment 20.6.4.98 of the Rio Grande Basin (*State of New Mexico Standards for Interstate and Intrastate Surface Waters*). Designated uses of 20.6.4.98 NMAC are livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact.

The inspectors arrived at the Ranchland Utilities Water Reclamation Facility at 09:10 hours and conducted an entrance interview with Mr. Leonard Quintana, Level IV Operator along with Robert Gutierrez, Level III, Operator. The inspector made introductions, presented her credentials, and discussed the purpose of the inspection with Mr. Quintana. An exit interview to discuss preliminary findings of the inspection was conducted with Mr. Quintana on site.

The NMED performs a specific number of CEI's annually for the United States Environmental Protection Agency (USEPA). The purpose of this inspection is to provide the USEPA with information to evaluate the permittee's compliance with their NPDES permit. The enclosed inspection report is based on verbal information supplied by the permittee's representatives, observations made by the NMED inspector, and a review of records maintained by the permittee, commercial laboratories, and/or NMED. Findings of the inspection are detailed on the attached EPA form 3560-3 and in the narrative Further Explanations section of the report.

Treatment Scheme

There are approximately 1200 homes currently served by the wastewater treatment facility. Two lift stations bring the influent into the headworks which consist of an auger for grit removal. The grit removed is taken to the Rio Rancho landfill for final disposal. From the headworks, flow continues to the Biolac® basin which is a synthetically lined basin with wave-oxidation fine bubble diffusers. On this date, many diffusers were malfunctioning. The Biolac® system uses moving aeration chains which improve the mixing efficiency of the basin. From the Biolac® basin, flow enters one of two circular clarifiers. At the time of the inspection, one clarifier was on-line. Influent then travels to the discfilter for polishing, which was not being used at this time. Flow then goes through the Ultraviolet system

for disinfection. Then, it is discharged through a Parshall flume to a holding pond where it is later used for irrigation on land application sites located within the Rancho Viejo development area. The effluent is discharged to Canada del Rancho during the winter months when irrigation is not necessary.

Sludge:

The aerobic sludge digester has a capacity of 85,000 gallons. The digester receives WAS from the clarifier and is digested and gravity thickened. Supernatant from the sludge digester is returned to the influent wet well.

A private contractor hauls digested sludge to a septage/sludge receiving station operated by the City of Santa Fe Wastewater Treatment Facility. The city completes additional treatment of the sludge prior to final surface disposal/composting.

Compliance Evaluation Inspection
Ranchland Utilities Water Reclamation Facility
NPDES Permit No. NM0030368
April 11, 2018

Further Explanations

Note: The sections are arranged according to the format of the enclosed EPA inspection checklist (Form 3560-3), rather than being ranked in order of importance.

Section A – Permit – Overall Rating “Unsatisfactory”

Permit requires in Part III, Section.A.4 Duty to Reapply:

“If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR 122.6 and any subsequent amendments.”

Findings for Section A – Permit:

The permittee has failed to submit an application 180 days prior to expiration of their current permit. Their current permit expires on July 31, 2018. The permittee stated that a consultant has been hired and he believes the application will be submitted to the Environmental Protection Agency (EPA), Region 6.

The permittee has yet to submit their application to either USEPA Region 6 or New Mexico Environment Department.

Section C – Operations and Maintenance – Overall Rating of “Unsatisfactory”

Permit requires in Part III, Section B.3 Proper Operation and Maintenance:

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets or discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back or auxiliary facilities or similar systems*

which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

Findings for Section C - Operation and Maintenance:

The Biolac® system has floating solids as well as noticeable grease. Some of the fine bubble diffusers were malfunctioning.

The Biolac® system utilizes a longer sludge age than other extended aeration systems. The sludge age in this particular system efficiently allows for a 30-70 day sludge time. It appears that the sludge age in this system is beyond the 70-day efficiency time for the Biolac®. The operator stated that the system is producing minimal Biochemical Oxygen Demand (<2 mg/L) and Total Suspended Solids (<2 mg/L). It may be beneficial for the system to remove some of the solids to allow a more efficient aeration.

During the inspection, the inspector asked for a spare parts list. There is no inventory list of spare parts available at the time of the inspection. The permittee provided a list on April 18, 2018 via email.

The permittee did not provide an emergency management plan during the inspection. However, on April 18, 2018, the permittee provided a plan.

Section D – Self-Monitoring – Overall Rating “Marginal”

Permit requires in Part III, C.5 Monitoring Procedures:

- a. Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified or approved by the Regional Administrator.*
- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurement and shall maintain appropriate records of such activities.*

Findings for Self-Monitoring:

The permittee has a contracted laboratory Hall Environmental Analysis Laboratory, Inc., that performs TSS, BOD and E. coli for the permittee. Samples for BOD collected on November 1, 2017, November 20, 2017, November 27, 2017, and December 12, 2017 show the DO depletion was less than 2.0 mg/L. Valid dilution has DO depletion of at least 2.0 mg/l AND has at least 1.0 mg/l DO left. The permittee needs to discuss the issues that may be occurring at the laboratory (quality control). The DO depletion less than 2.0 mg/L should be reported on their NetDMR report.

The permittee is required to sample once a week for BOD and TSS. Review of the benchsheets provided to NMED show that in October and December, 2017 the permittee sampled only 3 times, rather than weekly as required.

The permittee is required to do a six (6) hour composite sample for BOD and TSS, which appear to be flow proportional. It is unclear how the permittee is compositing their sample. Please see picture #11 for the calculation being used.

Section E – Flow Measurement – Overall rating of “Unsatisfactory”

The permit requires in Part III, Section C.6 Flow measurements:

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measures of the volume of the monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

Findings for Flow Measurement:

The permittee is required to calibrate their totalizer at least annually by an outside representative to insure accurate flow measurement. Accurate flow measurement is required when doing mass loading calculations.

The totalizer is placed in an improper location; the totalizer is located in the wrong position relative to the primary device. It is placed relatively close to the discharge point in an area of turbulence. It is imperative that the totalizer be placed in the appropriate manner to do calibration checks.

Section F – Laboratory – Overall rating of “Marginal”

Permit requires in Part III, C.5 Monitoring Procedures:

- a. An adequate analytical quality control program, including the analysis of sufficient standards, spikes and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.*

Findings for Laboratory:

The permittee stated they do duplicate sampling to fulfill the 10% duplicate sampling control requirements. However, review of the last quarter of 2017 show no duplicate samples.

The purpose of laboratory control procedures is to ensure high-quality analyses by the use of control samples, control charts, reference materials, and instrument calibration. The permittee and/or contract laboratory must initiate and maintain controls throughout the analysis of samples. Specifically, each testing batch must contain at least one blank, standard, duplicate, and spiked (as

applicable) sample analysis. When a batch contains more than 10 samples, every tenth sample should be followed by a duplicate and a spike (as applicable).

DISCHARGE MONITORING REPORT CALCULATION CHECK

BOD – October 2017

Sample Date:	Daily Flow (MGD) (GPM)X1440=GPD MGD= GPD/1,000,000	BOD (mg/l)	Calculated Daily Load (MGD) x Conc. x 8.34
10/4/2017	94 GPM = .13536 MGD	5.0	$(.13536) \times (5.0) \times 8.34 = 5.64$
10/17/2017	92 GPM = .13536 MGD	3.0	$(.13536) \times (3.0) \times 8.34 = 3.39$
10/25/2017	94 GPM = .13536 MGD	2.1	$(.13536) \times (2.1) \times 8.34 = 2.37$
Calculated Monthly Average (Loading):	$5.64 + 3.39 + 2.37 = 11.4 / 3 = 3.8 \text{ lbs/d}$		
Calculated Monthly Average (Conc.):	$5.0 + 3.0 + 2.1 = 10.1 / 3 = 3.3 \text{ mg/L}$		
Reported on DMR	4.0 lbs/d 30-d avg.; 5.8 lbs/d 7-d avg.* 3.4 mg/L 30-d avg., 5 mg/L 7-d avg.✓		

✓Matches calculations made by inspector as well as what was reported on DMR.

*Does not match what was reported on DMR.

BOD – November 2017

Sample Date:	Daily Flow (MGD)	BOD (mg/l)	Calculated Daily Load
11/1/2017	91 GPM = .13104 MGD	$<2.0^1$ PQL=2.0	$.13104 \times <2.0 \times 8.34 = <2.19$
11/8/2017	70 GPM = .1008 MGD	7.0	$.1008 \times 7.0 \times 8.34 = 5.89$
11/14/2017	96 GPM = .1382 MGD	<2.0	$.1382 \times <2.0 \times 8.34 = <2.31$
11/20/2017	93 GPM = .1339 MGD	$<2.0^1$	$.1339 \times <2.0 \times 8.34 = <2.23$
11/27/2017	101 GPM = .1454 MGD	$<2.0^1$	$.1454 \times <2.0 \times 8.34 = <2.43$
Calculated Monthly Average (Loading):	$<2.19 + 5.89 + <2.31 + <2.23 + <2.42 = <15.05$		
Calculated Monthly Average (Conc.):	$<2.0 + 7.0 + <2.0 + <2.0 - <2.0 = 13.0 / 4 = <3.75 \text{ mg/L}$		
Reported on DMR	3.04 lbs/d 30-d avg.; 5.89 7-d avg* $<3.75 \text{ mg/L}$ 30-d avg.; 7.0 mg/L 7-d avg.✓		

1 – DO Depletion less than 2.0 mg/L

✓Matches calculations made by inspector as well as what was reported on DMR.

*Does not match what was reported on DMR.

BOD – December 2017

Sample Date:	Daily Flow (MGD)	BOD (mg/l)	Calculated Daily Load
12/05/2017	87 GPM = .12528 MGD	2.0	$(.12528) \times (2.0) \times 8.34 = 2.09$
12/12/2017	85 GPM = .1224 MGD	$<2.0^1$	$(.1224) \times (<2.0) \times 8.34 = <2.04$
12/20/2017	60 GPM = .0864 MGD	2.0	$(.0864) \times (2.0) \times 8.34 = 1.44$
Calculated Monthly Average (Loading):	$2.09 + <2.04 + 1.44 = <5.57 \text{ lbs/d}$		
Calculated Monthly Average (Conc.):	$2.0 + <2.0 + 2.0 = 6.0 / 3 = 2.0 \text{ mg/L}$		
Reported on DMR	$<5.57 \text{ lbs/d}$ 30-d avg.; 2.09 lbs/d 7-d avg.* 2.0 mg/L 30-d avg; 2.0 mg/L 7-d avg.✓		

1 – DO Depletion less than 2.0 mg/L

✓Matches calculations made by inspector as well as what was reported on DMR.

*Does not match what was reported on DMR.

TSS – OCTOBER 2017

Sample Date:	Daily Flow (MGD)	TSS (mg/l)	Calculated Daily Load
10/4/2017	94 GPM = .13536 MGD	ND = 4.0 PQL	$(.13536) \times 4.0 \times 8.34 = 4.52$
10/17/2017	92 GPM = .13536 MGD	9.0	$(.13536) \times 9.0 \times 8.34 = 10.16$
10/25/2017	94 GPM = .13536 MGD	ND = 4.0 PQL	$(.13536) \times 4.0 \times 8.34 = 4.52$
Calculated Monthly Average (Loading):			
Calculated Monthly Average (Conc.)	$<2.0 + <2.0 + <2.0 = <6.0 / 3 = <2.0 \text{ mg/L } \checkmark$		
Reported on DMR	2.0 lbs/d 30-D avg.; 2.1 lbs/d 7-D avg. * < 2.0 mg/L 30-D avg.; < 2.0 mg/L 7-D avg. \checkmark		

✓ Matches calculations made by inspector as well as what was reported on DMR.

*Does not match what was reported on DMR.

TSS- NOVEMBER 2017

Sample Date:	Daily Flow (MGD)	TSS (mg/l)	Calculated Daily Load
11/1/2017	91 GPM = .13104 MGD	ND = 4.0 PQL	$.13104 \times 4.0 \times 8.34 = <4.37$
11/8/2017	70 GPM = .1008 MGD	ND = 4.0 PQL	$.1008 \times 4.0 \times 8.34 = <3.36$
11/14/2017	96 GPM = .1382 MGD	4.0	$.1382 \times 4.0 \times 8.34 = 4.61$
11/20/2017	93 GPM = .1339 MGD	ND = 4.0 PQL	$.1339 \times 4.0 \times 8.34 = <4.67$
11/27/2018	101 GPM = .1454 MGD	ND = 4.0 PQL	$.1454 \times 4.0 \times 8.34 = <4.85$
Calculated Monthly Average (Loading):	$<4.37 + <3.36 + 4.61 + <4.67 + <4.85 = 21.86/4 = <4.37 \text{ lbs/d}$		
Calculated Monthly Average (Conc.)	$<4.0 + <4.0 + 4.0 + <4.0 + <4.0 = <5.0 \text{ mg/L}$		
Reported on DMR	5.4 lbs/d 30-d avg; <4.85 lbs/d 7-d avg. * <4.0 mg/L 30-d avg; 4.0 mg/L 7-d avg. \checkmark		

✓ Matches calculations made by inspector as well as what was reported on DMR.

*Does not match what was reported on DMR.

TSS – DECEMBER 2017

Sample Date:	Daily Flow (MGD)	TSS (mg/l)	Calculated Daily Load
12/5/2017	87 GPM = .1252 MGD	ND = 4.0 PQL	$.1252 \times <4.0 \times 8.34 = <4.18$
12/12/2017	85 GPM = .1224 MGD	ND = 4.0 PQL	$.1224 \times <4.0 \times 8.34 = <4.08$
12/20/2017	60 GPM = .0864 MGD	ND = 4.0 PQL	$.0864 \times <4.0 \times 8.34 = <2.88$
Calculated Monthly Average (Loading):	$<4.18 + <4.08 + <2.88 = <11.14 \text{ lbs/d}$		
Calculated Monthly Average (Conc.)	$<4.0 + <4.0 + <4.0 = 12/3 = 4.0 \text{ mg/L}$		
Reported on DMR	4.8 lbs/d 30-d avg; 5.0 lbs/d 7-d avg. * 4.0 mg/d 30-d avg; 4.0 mg/d 7-d avg. \checkmark		

✓ Matches calculations made by inspector as well as what was reported on DMR.

*Does not match what was reported on DMR.

NMED/SWQB
Official Photograph Log
Photo # 1

GOOGLE EARTH – OVERVIEW OF RANCHLAND UTILITIES	
City/County: Santa Fe / Santa Fe	State: New Mexico
Location: Ranchland Utilities	
Subject: Overview of Ranchland Utilities	



NMED/SWQB
Official Photograph Log
Photo # 2

Photographer: Daniel Valenta	Date: April 11, 2018	Time: 0942 Hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Biolac extended aeration pond – BioFuser fine bubble diffuser assemblies appear to be nonfunctional in various areas of the pond.		



NMED/SWQB
Official Photograph Log
Photo # 3

Photographer: Daniel Valenta	Date: April 11, 2018	Hours: 0943 Hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Biolac pond – significant solids in pond > 30-70 days		



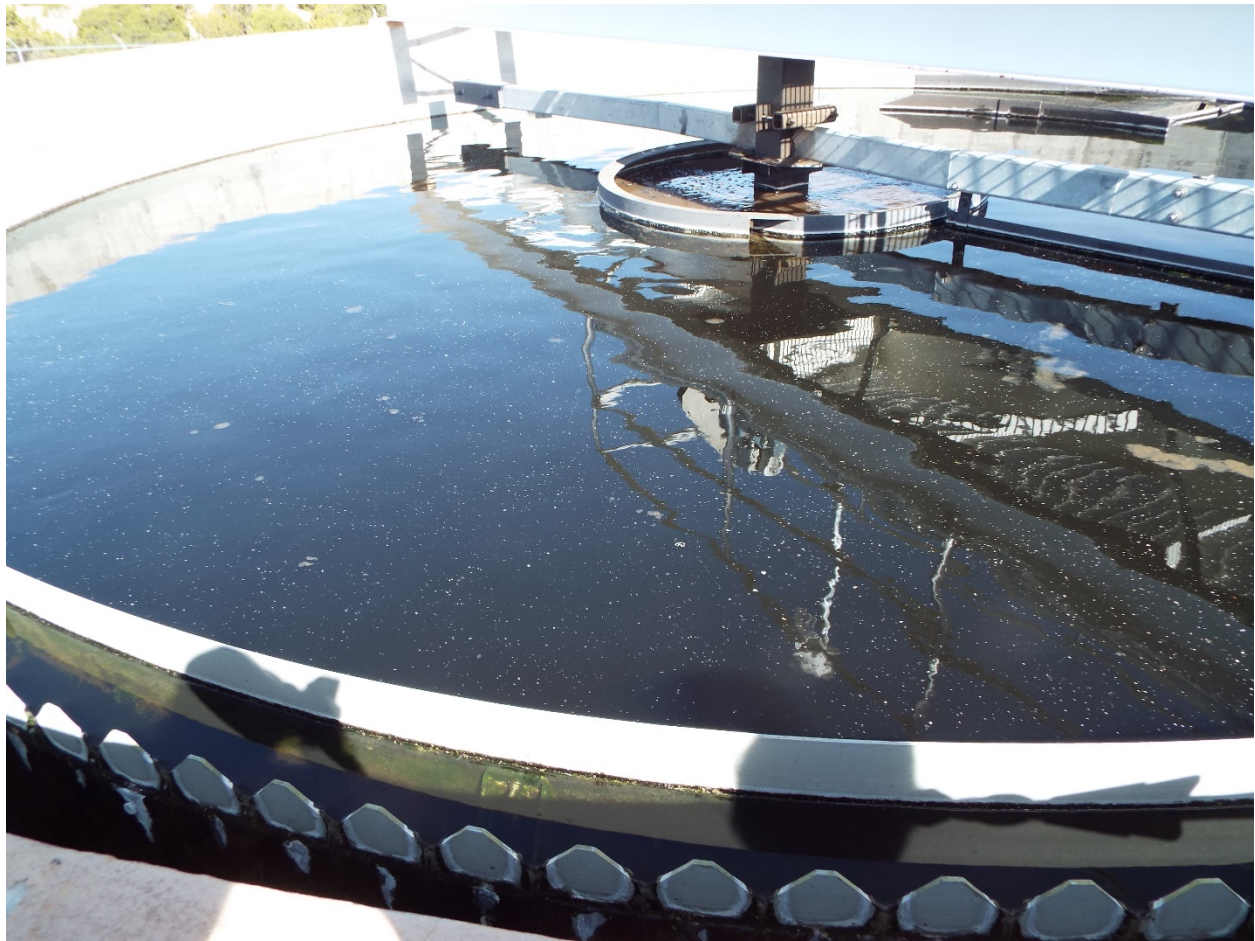
NMED/SWQB
Official Photograph Log
Photo # 4

Photographer: Daniel Valenta	Date: April 11, 2018	Hours: 0952 hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Grease in pond		



NMED/SWQB
Official Photograph Log
Photo # 5

Photographer: Daniel Valenta	Date: April 11, 2018	Hours: 0954 hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: West Clarifier with appearance of ashing.		



NMED/SWQB
Official Photograph Log
Photo # 6

Photographer: Daniel Valenta	Date: April 11, 2018	Hours: 0954 Hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Short-circuiting occurring over weirs, algal growth.		



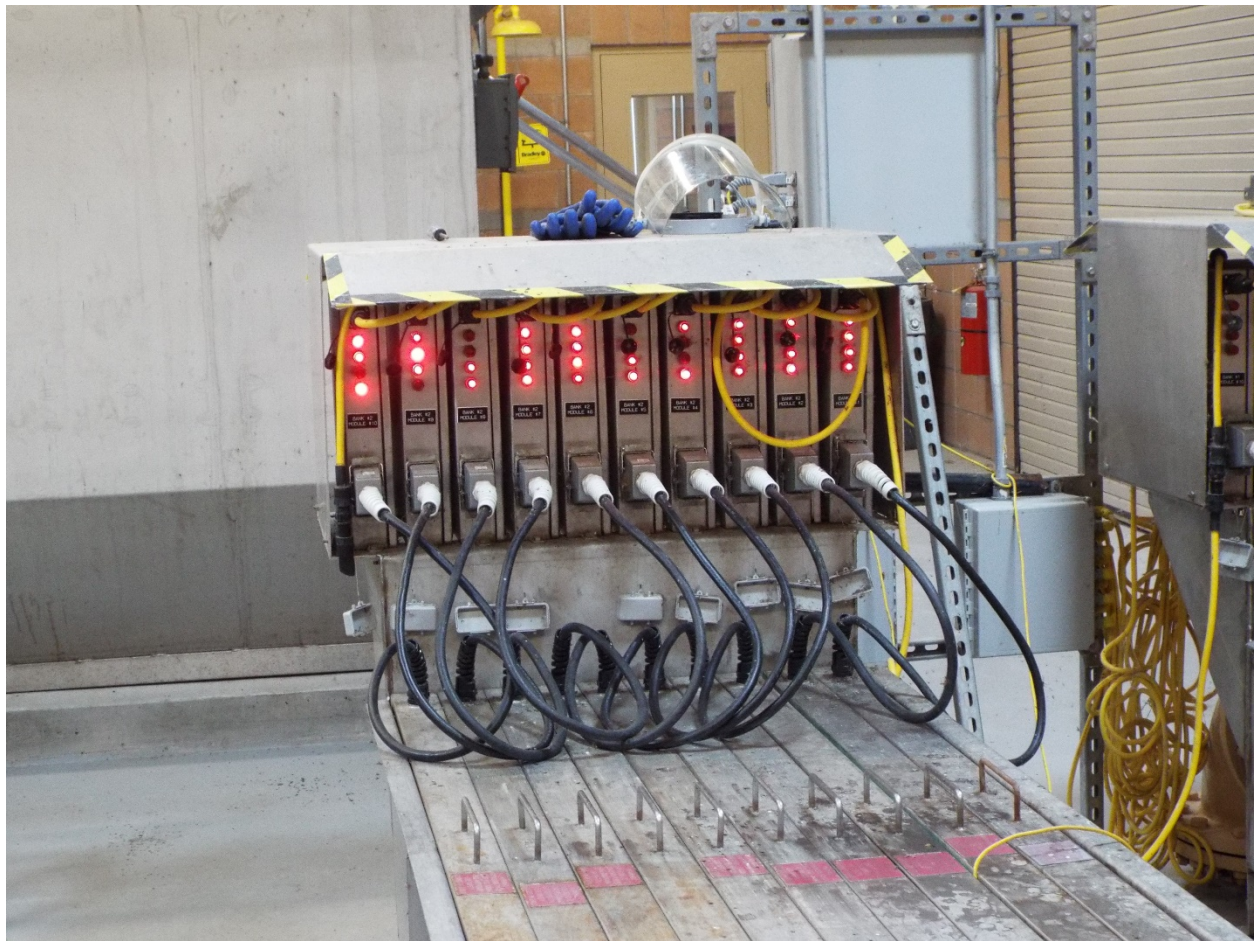
NMED/SWQB
Official Photograph Log
Photo # 7

Photographer: Daniel Valenta	Date: April 11, 2018	Hours: 0956 Hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Sludge judge reading of clarifier		



NMED/SWQB
Official Photograph Log
Photo # 8

Photographer: Daniel Valenta	Date: April 11, 2018	Hours: 1000 Hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: UV lights – several banks out of order (88% UV)		



NMED/SWQB
Official Photograph Log
Photo # 9

Photographer: Daniel Valenta	Date: April 11, 2018	Hours: 1009 Hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Staff gage reading		



NMED/SWQB
Official Photograph Log
Photo #10

Photographer: Daniel Valenta	Date: April 11, 2018	Hours: 1009 Hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: 6"Parshall Flume Conversion Sheet (0.2 = 72.7 GPM) Totalizer was reading 100 GPM		

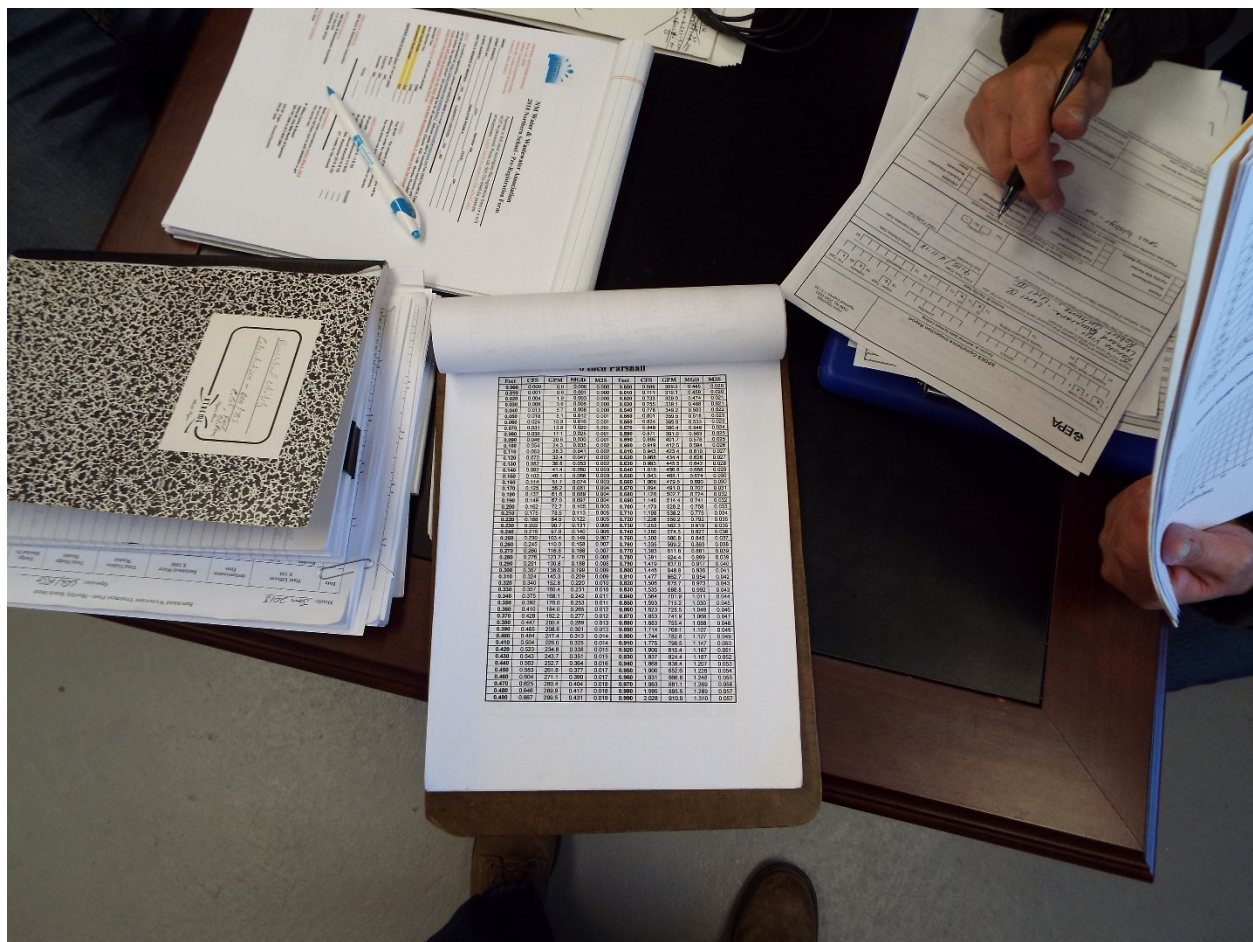


Photo #11

Subject: 6 – Hour Composite Sheet.

Ver Composite Scryb 6